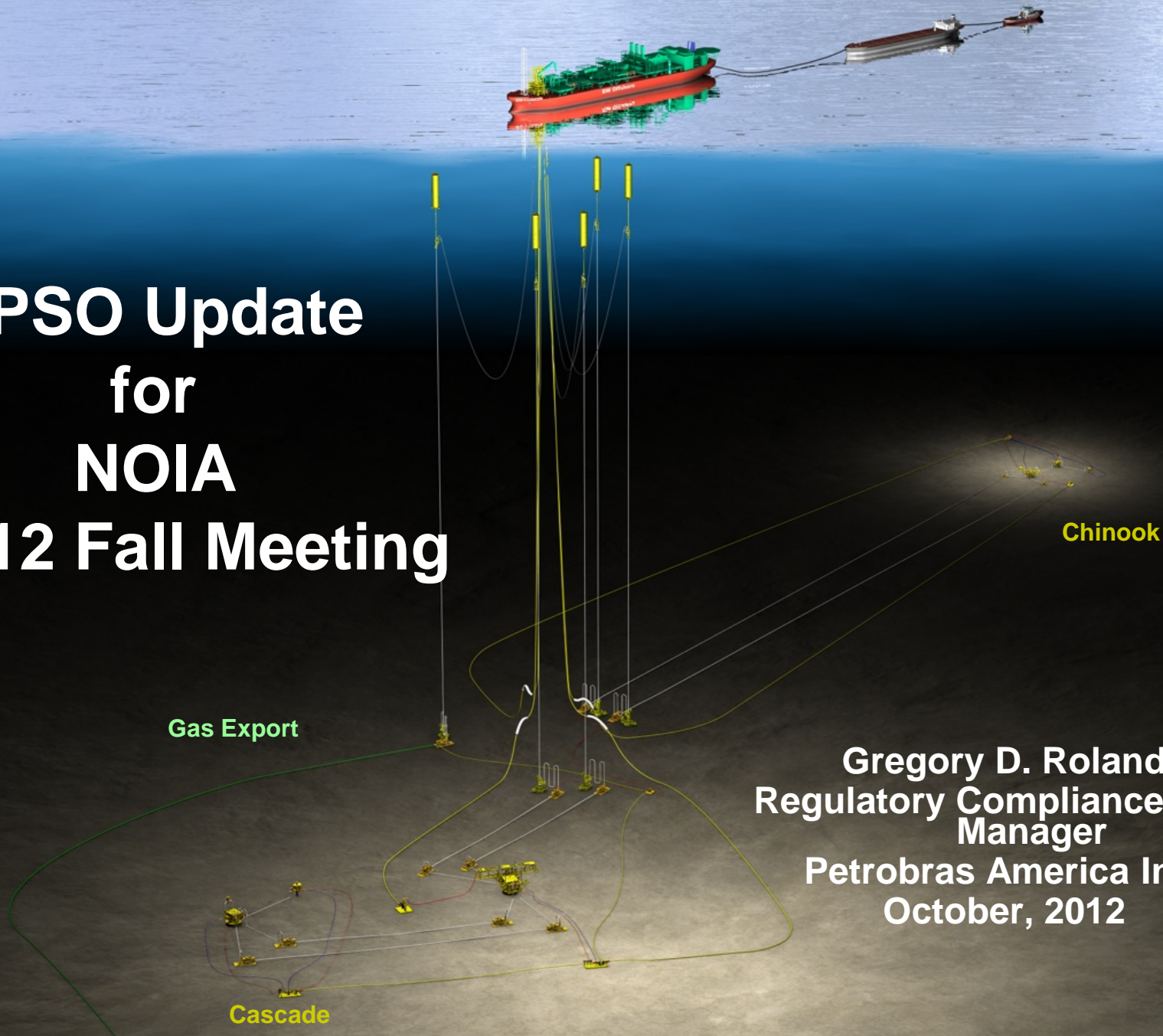


FPSO Update for NOIA 2012 Fall Meeting



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October, 2012

Disclaimer

The presentation may contain forecasts about future events. Such forecasts merely reflect the expectations of the Company's management. Such terms as "anticipate", "believe", "expect", "forecast", "intend", "plan", "project", "seek", "should", along with similar or analogous expressions, are used to identify such forecasts. These predictions evidently involve risks and uncertainties, whether foreseen or not by the Company. Therefore, the future results of operations may differ from current expectations, and readers must not base their expectations exclusively on the information presented herein. The Company is not obliged to update the presentation/such forecasts in light of new information or future developments. All projects forecasted herein are subject to approval by the appropriate stakeholders.

CAUTIONARY STATEMENT FOR US INVESTORS

The United States Securities and Exchange Commission permits oil and gas companies, in their filings with the SEC, to disclose only proved reserves that a company has demonstrated by actual production or conclusive formation tests to be economically and legally producible under existing economic and operating conditions. We use certain terms in this presentation, such as oil and gas resources, that the SEC's guidelines strictly prohibit us from including in filings with the SEC.

History



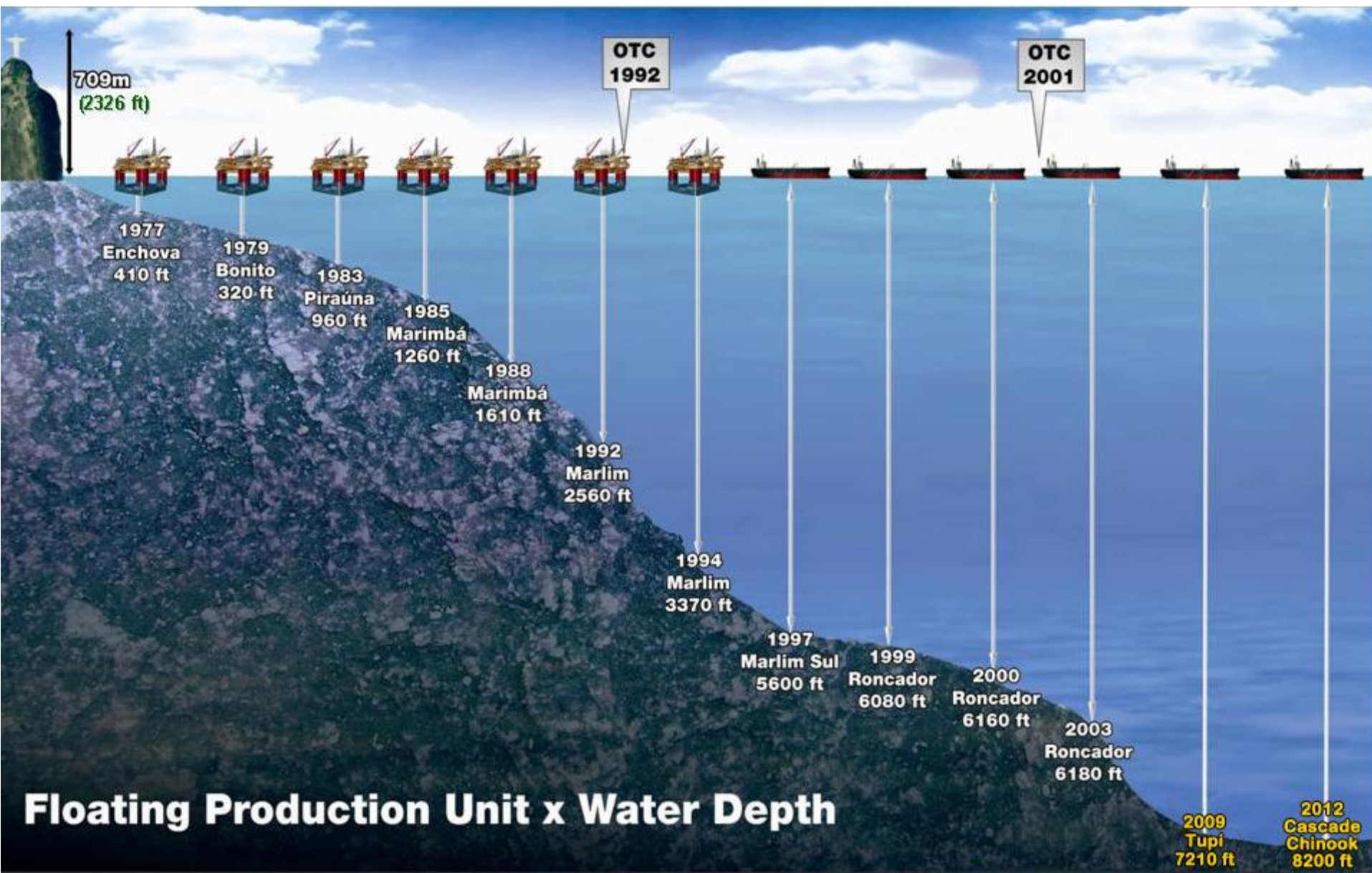
More History

- **1891 – 1896 Ohio and California**
- **1900 – Gulf of Mexico, Texas and Louisiana**
- **Drilled on platforms, not too far from shore**
- **1947 - Approximately 50 years pass – out of sight of land**
- **Need for storage or pipelines....**
- **Going farther out, the more the technology has to increase**
- **Floating rigs / facilities**

FPSO

**Floating
Production
Storage
and
Offloading**

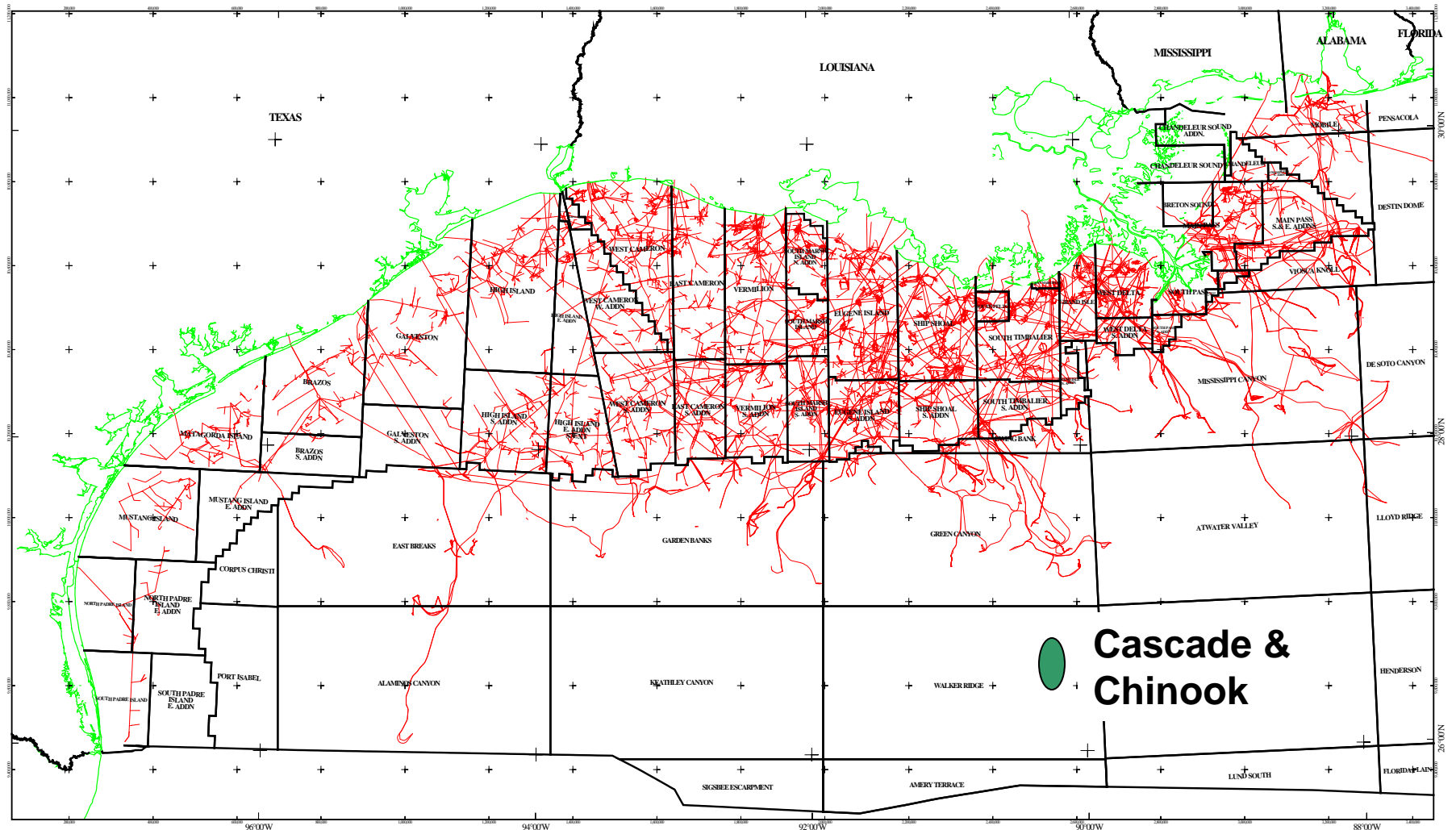
Long History of Technological and Operational Leadership in Deepwater



Cascade and Chinook Field History (1996 Lease Sale)

Year	Cascade	Chinook
2002	1 Discovery Well	
2003		1 Discovery Well
2005	2 Appraisal Wells	
2006	<i>Petrobras Operator</i>	
2009	2 Wells	
2010		1 Well
2012	1 Well Producing 2 nd Well by end of year	1 Well Producing 2 nd Well drilling

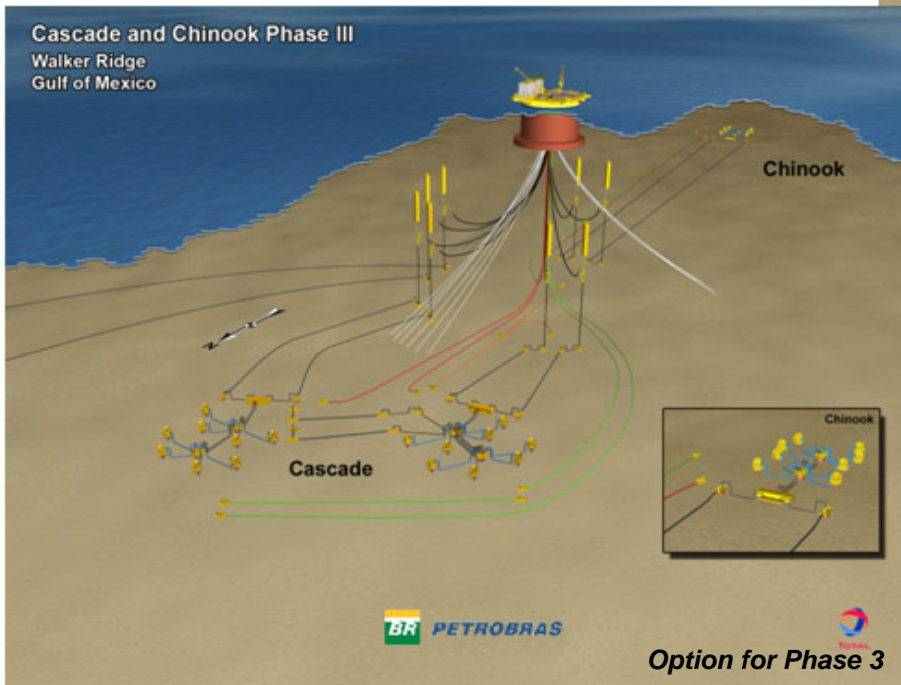
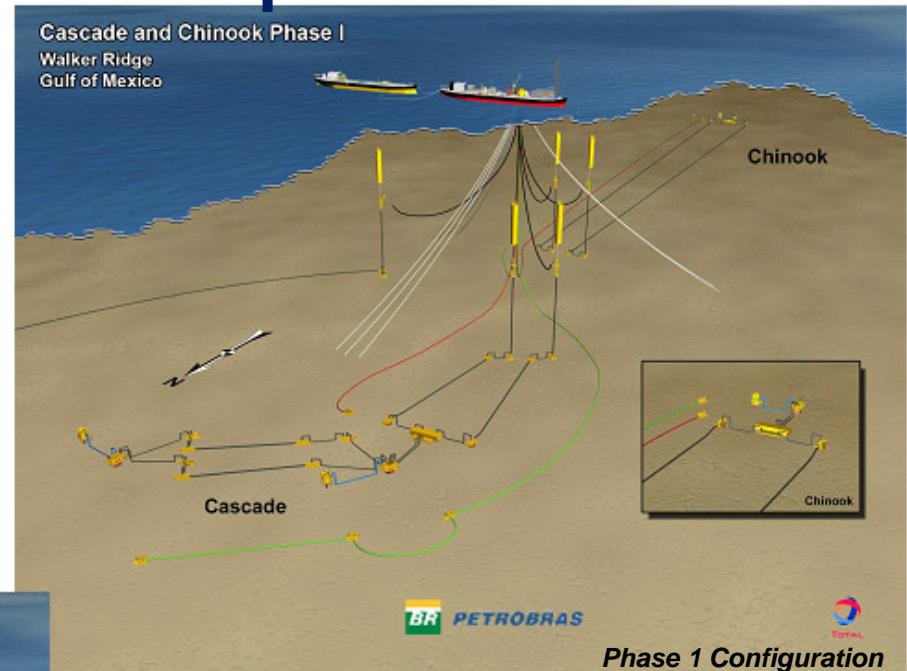
Cascade and Chinook Location & Infrastructure



Cascade and Chinook Phased Development

Phase 1

- 2 Wells from Cascade & 1 from Chinook;
- Subsea X-Trees, Manifolds, Pumps, Flowlines and Risers;
- Gas exported by Pipeline and Oil by Shuttle –Tanker.



Potential Phases 2 & 3

- Up to 6 wells on Cascade & 7 on Chinook;
- Subsea Trees and Manifolds;
- Replacement of the FPSO;
- Oil Export: Shuttle Tanker vs. Pipeline.

Cascade and Chinook Well Drilling and Completion Rigs

2008



**Ocean Endeavor
Diamond Offshore Drilling**

2008



**West Sirius
Seadrill Limited**

2009



**Discover Deep Seas
Transocean Ltd.**

2011

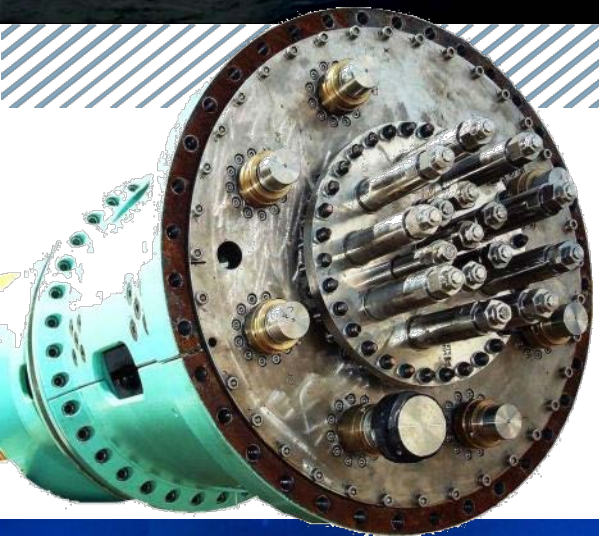


**ENSCO – Mendocino
Drill Ship**

2012



**VANTAGE - Titanium Explorer
Drill Ship**



SUBSEA INNOVATIONS

- First pull-in of umbilicals using subsea winch operated by ROVs
- Deepest pipe-in-pipe flowlines
- Deepest gas export pipeline (8,200 ft)



4.- Deepest subsea boosting system (8,800 ft)

Cascade and Chinook Wave Buoy Installation and Operation



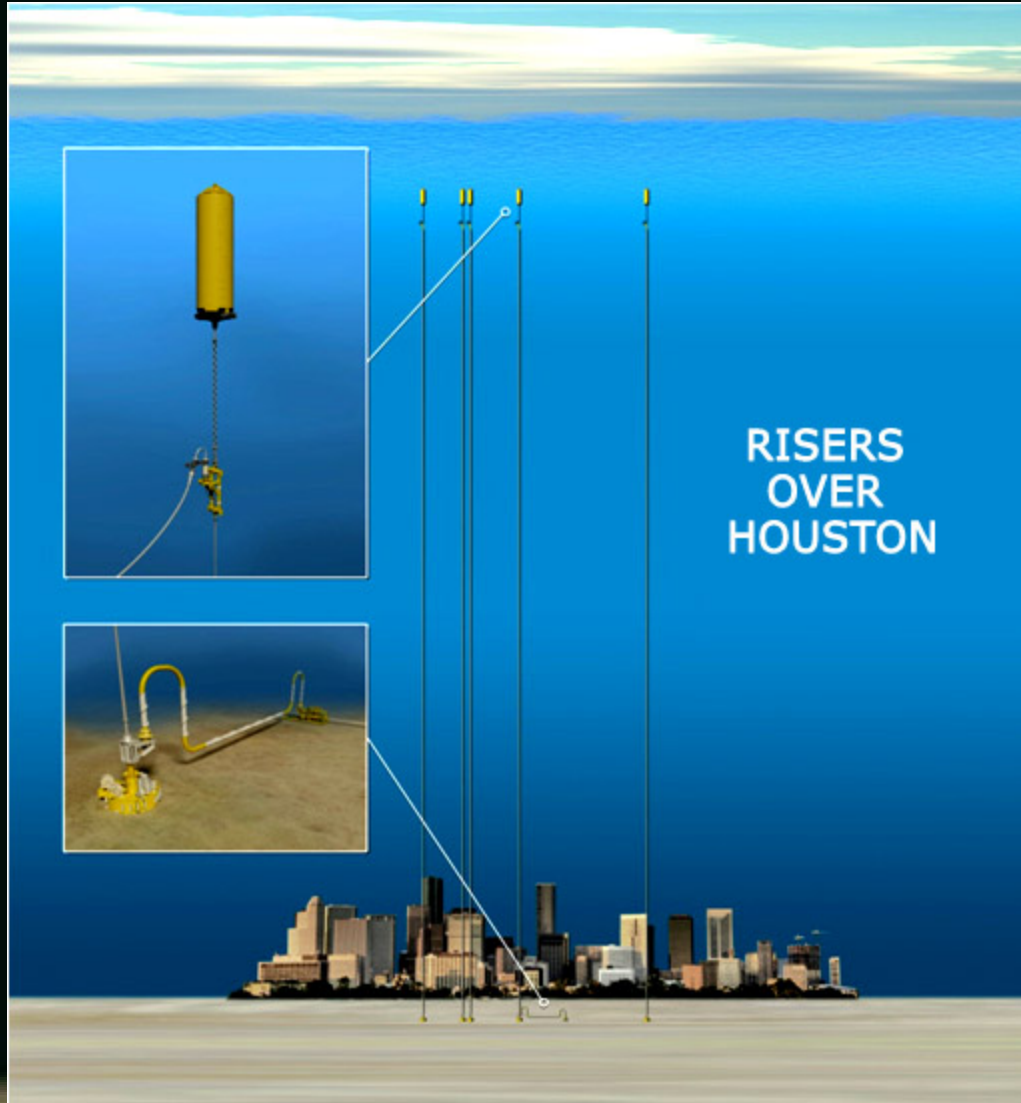
Wave Buoy on deck



Wave Buoy in water

Riser

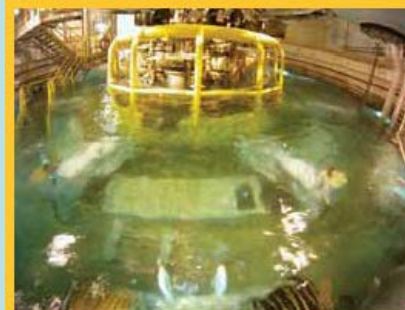
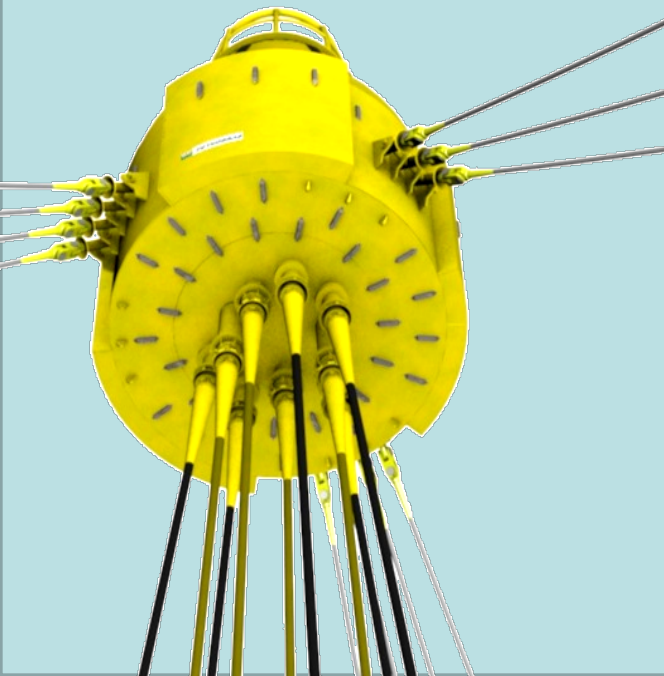
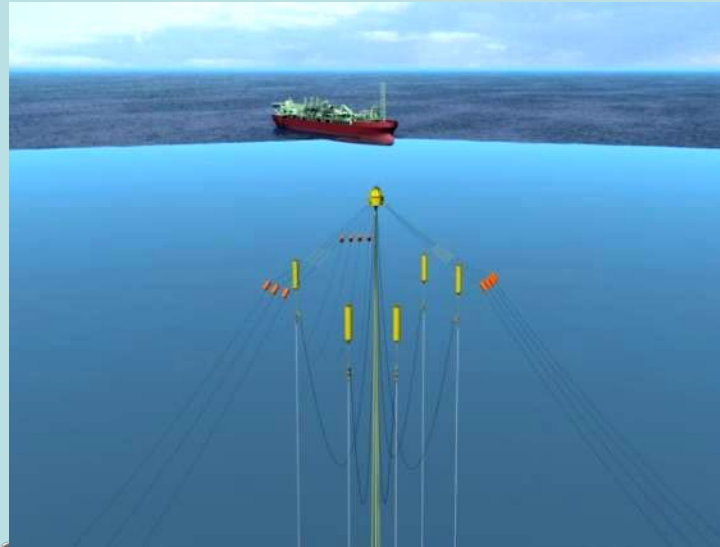
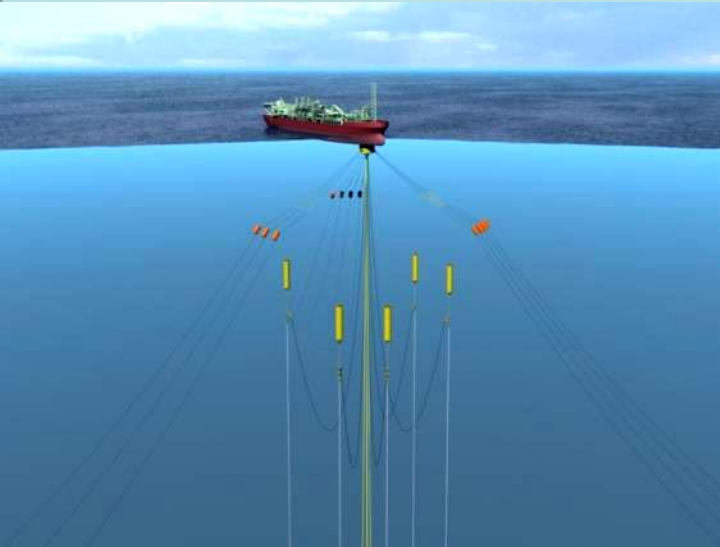
Deepest and Highest Pressure Rated
Free Standing Hybrid Risers (8200 ft)



4 Production Risers
1 Gas Export Riser

Buoy Disconnection

Should a hurricane come her way, the FPSO can disconnect from the subsea structures and go to safe waters



Subsea Installation Vessels



Technip - Deep Blue



Subsea 7 Seven Seas



Technip - Olympic Challenger

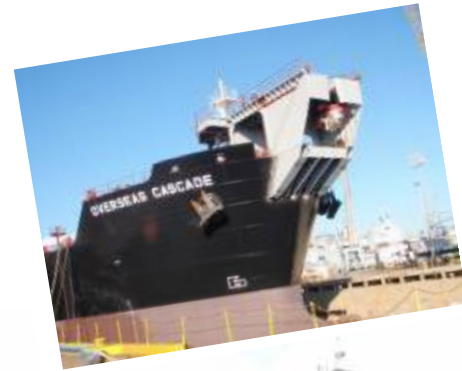


Hereema Balder



Veolia – Viking Poseidon

Shuttle Tanker Construction in Philadelphia



Shuttle Launching

Shuttle Tanker Overseas Cascade



Shipping in the Gulf of Mexico



Part of BP's Macondo Operation

**First use of purpose-built
Jones Act Shuttle Tankers in the USA**



FPSO

/ Floating Production, Storage and Offloading

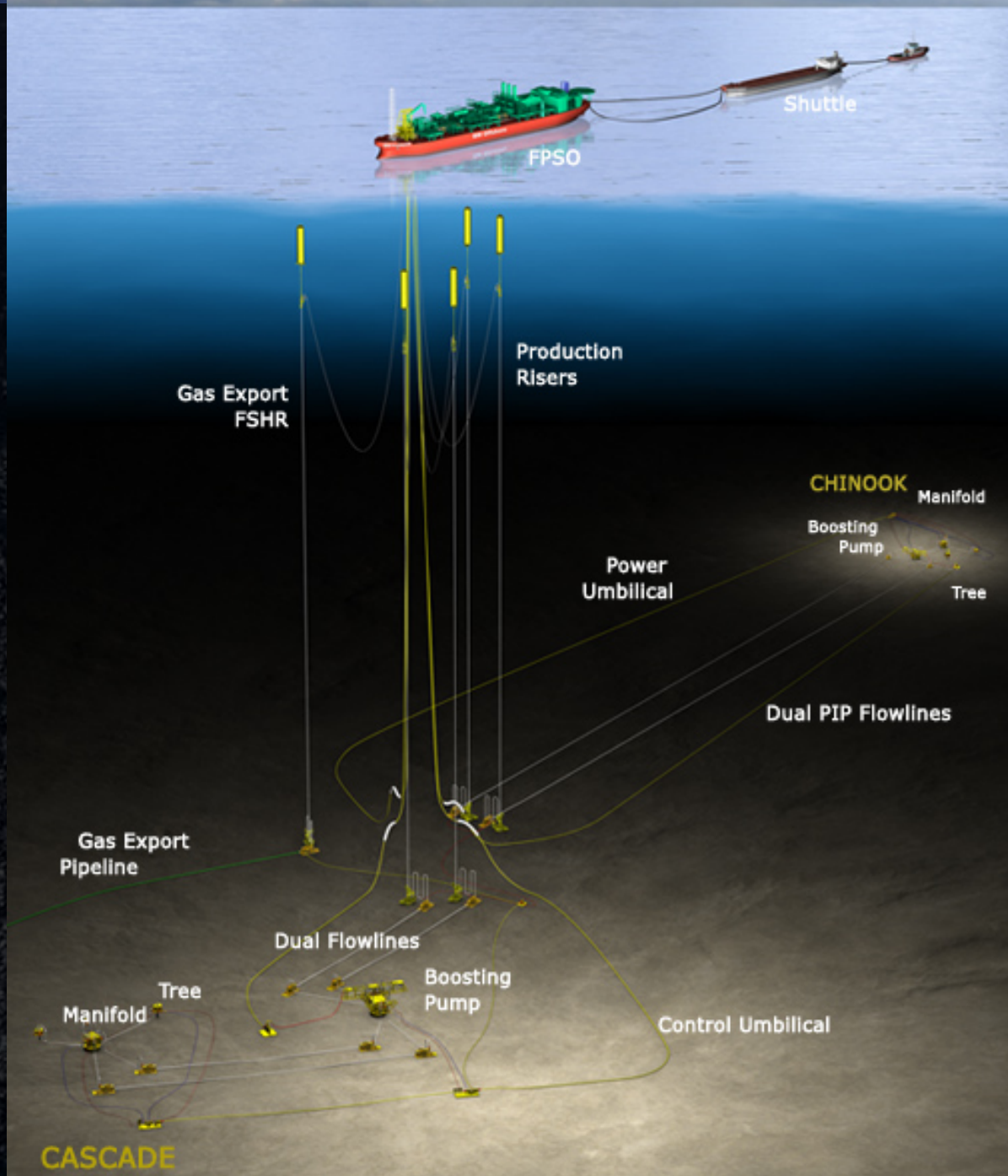
Vessel Name: BW Pioneer
Length - 794 ft
Processing Capacity – 80,000 Barrels/day
Storage Capacity – 500,000 BBL
Production: February 2012

First FPSO in the US Gulf of Mexico
Deepest Floating Production System in the World (8200 ft)

CASCADE AND CHINOOK

Main Highlights

1. **First** FPSO in the US Gulf of Mexico.
2. **Deepest** floating production system (8,200 ft).
3. **First** use of Purpose-built Jones Act shuttle tankers in the US.
4. **First** pull-in of umbilicals using subsea winch operated by ROV's.
5. **Deepest** and highest pressure rated free standing hybrid risers (8,200 ft at 10,000 psi).
6. **Deepest** pipe-in-pipe flowline (8,800 ft).
7. **Deepest** subsea boosting system (8,800ft).
8. **Deepest** gas export pipeline (8,200 ft).
9. **First** single trip multi-zone – Frac Pack System application (3 zones) in deep wells (27,000 ft).





SAFETY FIRST

Over 3 million man-hour
without a Lost Time
Incident



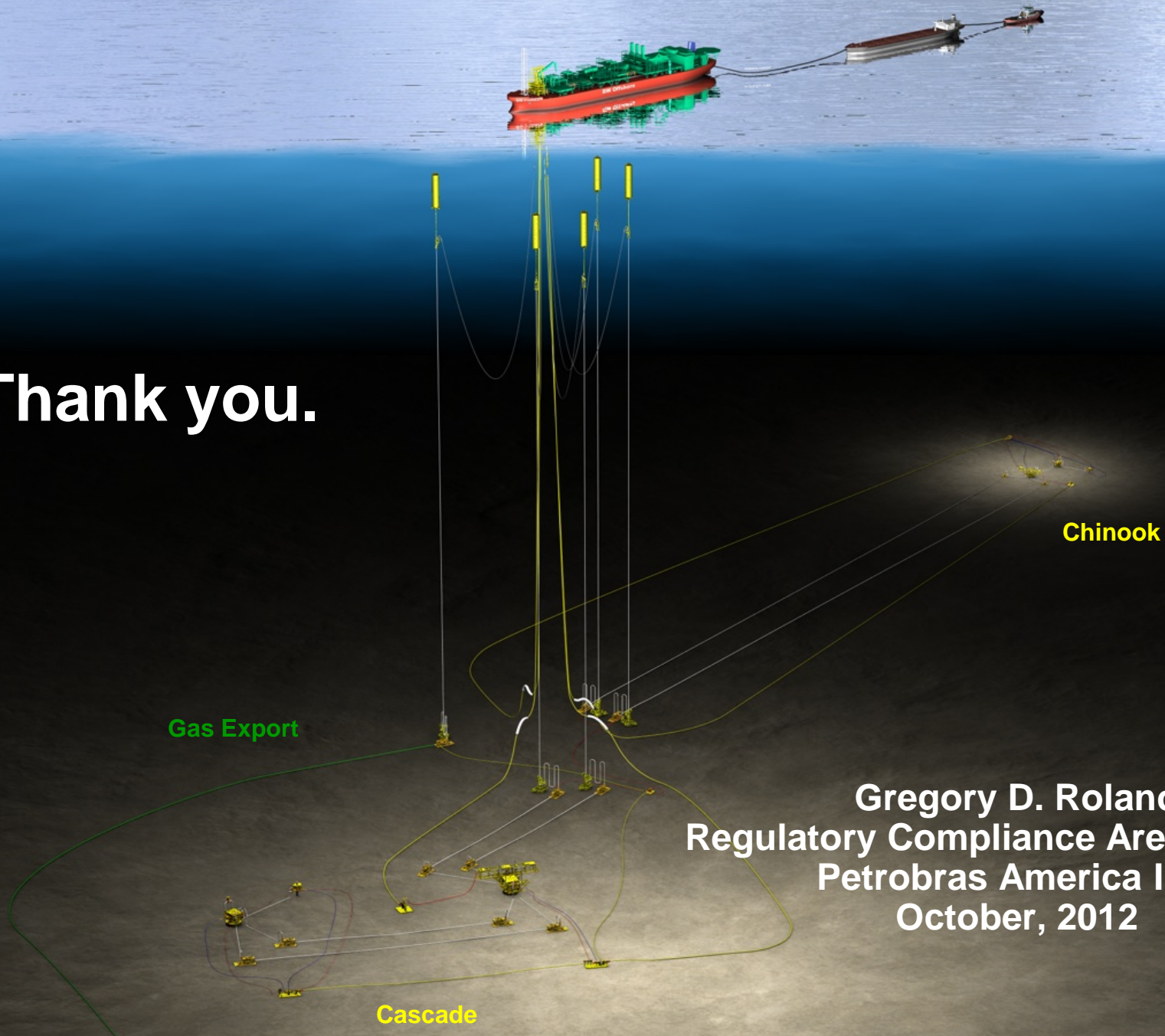
FPSO BW PIONEER



FPSO BW PIONEER



Thank you.



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